PATENT ABSTRACTS OF JAPAN

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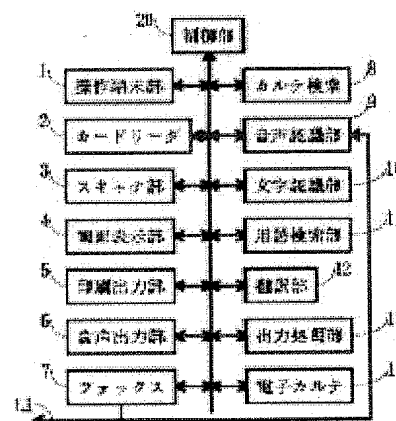|	
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(54) MEDICAL RECORD TRANSLATION SYSTEM

(57)Abstract:
PROBLEM TO BE SOLVED: To provide a means with which a patient can comprehend the described contents of his own medical record without requiring the lavor of any other person such as a doctor.
SOLUTION: When the described contents of the medical record can not be comprehended, they are comprehended by getting the explanation of these descriptions through a medical record translation system. In the case of electronic medical record, an ID is inputted from an operating terminal part 1 and the medical record is retrieved from an electronic medical record storage part 14 by a medical record retrieving part 8. In the case of the handwritten medical record, the image of the medical record is read from a scanner part 3, and respective characters are recognized by a character recognizing part 10. The retrieved contents are displayed on a picture display part 5, and the desired section to be translated for the patient is designated by the mouse or the like of the operating terminal part 1.

The semantic contents of respective terms included in the designated translation range are retrieved by a term retrieval part 11, the explanatory sentence of terms is constituted by a translation part 12 while using the meaning of terms retrieved by the term retrieving part 11, and displayed on the picture display part 5 by an output processing part 14 and the semantic contents of terms in the medical record are presented for the patient.

CLAIMS

[Claim(s)]

[Claim 1]A clinical recording specifying means which specifies a clinical recording used in a hospital etc. according to a patient, and a term specifying means which specifies a term written down in the clinical recording, A clinical recording translation system as comes to show [a patient] the contents of a definition which were provided with a translating means which acquires explanation whose semantic content which the term shows a patient can understand from the term, and an output means which outputs the explanation and is shown to a patient, and were indicated in the patient's clinical recording according to a patient's request.

[Claim 2]Make said clinical recording into an electronic chart electronically recorded using a magnetic storage means etc., and a clinical recording specifying means, The clinical recording translation system according to claim 1 characterized by searching and specifying the patient's clinical recording out of said electronic chart from inputted patient ID as patient ID which specifies a patient whom a patient inputs.

[Claim 3]The clinical recording translation system according to claim 2 performing an input of said patient ID by providing a card reader which reads contents which memorized patient ID to a patient's registration card electronically memorized by a magnetic storage means etc., and the patient's registration card, and reading a patient's registration card by the card reader.

[Claim 4]Use said clinical recording as a handwriting clinical recording indicated by handwriting etc. on space, and a term specifying means of the clinical recording, The clinical recording translation system according to claim 1 carrying out [specifying by providing a character recognition section which recognizes and codes a character of a scanner which reads an image of the handwriting clinical recording, and a read image, being indicated in the handwriting clinical recording and identifying a character, and].

[Claim 5]The clinical recording translation system according to claim 1 performing said output means by providing a printout part which carries out the printout of the explanation of a term of a clinical recording, printing on a paper, and showing a patient.

[Claim 6]The clinical recording translation system according to claim 1 performing said output means by providing a speech synthesis section which compounds and outputs explanation of a term of a clinical recording to a sound, and explaining to a patient with a sound.

[Claim 7]The clinical recording translation system according to claim 1 performing said output means by providing a fax transmission part which transmits explanation of a term of a clinical recording by fuck SHIMIRI, and transmitting to a patient by fuck SHIMIRI.

[Claim 8]The clinical recording translation system according to claim 1, wherein an input of said patient ID provides a voice recognition part and inputs it with a sound by a telephone.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]

[Field of the Invention]This invention relates to the clinical recording translation system which explains plainly for a patient in a hospital etc. the clinical recording in which a patient's clinical recording etc. are entered using a machine without sparing time, such as a medical practitioner.

[0002]

[Description of the Prior Art]obtaining for being indicated in the technical term or the foreign language, even if a patient looks at his own clinical recording conventionally etc., even if I question a medical practitioner, and I get him to explain or a large hospital explains by carrying out at a special counselor's place when it is indicated and you cannot understand a semantic content — etc. — he understood. However, in such a means, there are if a busy medical practitioner's time must be spared, or problems — since I am busy, sufficient explanation is not given. In placing a counselor etc. separately, helps, such as a counselor, are required and it becomes uneconomical.

[0003]

[Problem to be solved by the invention]This invention was made in view of the above-mentioned problem, and an object of this invention is for a patient to provide a means by which he can understand description of his own clinical recording without hanging a help, without imposing a medical practitioner's etc. time and effort.

[0004]

[Means for solving problem]The clinical recording specifying means which specifies the clinical recording in which a patient's clinical recording etc. are entered in a hospital etc. according to a patient, The term specifying means which specifies the term written down in the clinical recording, and the translating means which acquires the explanation whose semantic content which the term shows from the term a patient can understand, It has an output means which outputs the explanation and is shown to a patient, he shows a patient the contents of a definition indicated in the patient's clinical recording according to a patient's request, and a patient enables it to understand description of his own clinical recording, without hanging a help, without imposing a medical practitioner's etc. time and effort.

[0005]

[Mode for carrying out the invention]The clinical recording specifying means which specifies the clinical recording in which a patient's clinical recording etc. are entered in a hospital etc. according to a patient, The term specifying means which specifies the term written down in the clinical recording, and the translating means which acquires the explanation whose semantic content which the term shows from the term a patient can understand, It has an output means which outputs the explanation and is shown to a patient, and carries out as [show / the contents of a definition indicated in the patient's clinical recording according to a patient's request / a patient].

[0006]Said clinical recording is made into the electronic chart electronically recorded using a magnetic storage means etc., and as patient ID which specifies the patient whom a patient inputs, from inputted patient ID, a clinical recording specifying means searches the patient's clinical recording out of said electronic chart, and is specified.

[0007]The card reader which reads the contents which memorized patient ID to the patient's

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registration card electronically memorized by the magnetic storage means etc. and the patient's registration card is provided, and the input of said patient ID is performed by reading a patient's registration card by the card reader.

[0008]Use said clinical recording as the handwriting clinical recording indicated by handwriting etc. on space, and the term specifying means of the clinical recording, The character recognition section which recognizes and codes the character of the scanner which reads the image of the handwriting clinical recording, and the read image is provided, and it specifies by being indicated in the handwriting clinical recording and identifying a character.

[0009]Said output means provides a printout part which carries out the printout of the explanation of a term of a clinical recording, and performs it by printing on a paper and showing a patient.

[0010]Said output means provides a speech synthesis section which compounds and outputs explanation of a term of a clinical recording to a sound, and performs it by explaining to a patient with a sound.

[0011]Said output means provides a fax transmission part which transmits explanation of a term of a clinical recording by fuck SHIMIRI, and performs it by transmitting to a patient by fuck SHIMIRI.

[0012]An input of said patient ID provides a voice recognition part, and inputs it with a sound by a telephone.

[0013]

[Working example]A system block figure of a clinical recording translation system according [drawing 1] to this invention and drawing 2 are the outline flow charts. When a patient cannot understand description of his own clinical recording in a hospital etc., he comes to hand and understands explanation of the description with a clinical recording translation system. At Step S1, the clinical recording first judges an electronic chart or handwriting clinical recordings, such as handwriting and a word processor, which were recorded on the electronic chart storage parts store 14 as a database. In the case of an electronic chart, its ID is inputted from the operation terminal part 1, and by the clinical recording retrieval part 8, the electronic chart is searched with Step S2 from a database, and it opens on a processing memory of the control section 20 at it. Similarly, when the clinical recording concerned is a handwriting clinical recording, an image of the clinical recording is read into the control section 20 from the scanner part 3 at Step S3, and by step S4, by the character recognition section 10, each character in an image of a clinical recording is recognized, and it is considered as a character code.

[0014]In the translation range specification of Step S5, the contents or the contents which carried out character recognition of said searched electronic chart is displayed on the display section 4, and a patient specifies the portion which desires explanation with the mouse of an operation terminal part, etc. The term retrieval part 11 is Step S6, and searches each contents of a definition included in specification, now the ***** range out of the dictionary in the term retrieval part 11. With the explanatory note composition of Step S6, using the definition searched with the term retrieval part 11, the translating part 12 constitutes a terminological explanatory

note, displays on the display section 5 by the output processing part 13 at Step S8, and shows a patient the contents of a definition of a clinical recording.

[0015]In the case of the electronic chart recorded on the electronic chart storage parts store, the clinical recording which asks for explanation of description, When searching the clinical recording with Step S2, the patient's registration card which serves as a magnetic card, for example can memorize, ID can be read from the card reader 2, and can be inputted, and the patient's clinical recording can also be searched and specified. ID which forms the voice recognition part 9 and is inputted with a sound from a patient through the telephone line L1 is coded, and it may be made to search a clinical recording.

[0016]The explanatory note of the contents of a definition of the clinical recording constituted from Step S7 is printed and outputted to a paper from the printout part 5 by the output processing part 13, and can also be shown to a patient. Or it outputs from the voice output part 6 which consists of loudspeakers etc. as a sound by the speech synthesis section similarly provided in the output processing part 13, and may be made for a sound to explain to a patient. By the output processing part 13, the explanatory note of a previous clinical recording is image-ized, it transmits to fax receivers, such as a patient's home, via the telephone line L1 by the fax transmission part 7, and a patient can be shown.
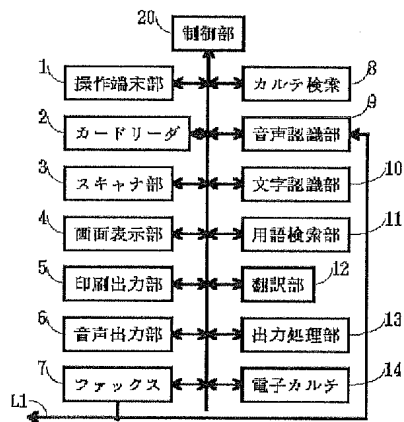
[0017]

[Effect of the Invention]This invention is carried out with a form which was explained above, and does so an effect which is indicated below.

[0018]The clinical recording specifying means which specifies the clinical recording in which a patient's clinical recording etc. are entered in a hospital etc. according to a patient, The term specifying means which specifies the term written down in the clinical recording, and the translating means which acquires the explanation whose semantic content which the term shows from the term a patient can understand, By having an output means which outputs the explanation and is shown to a patient, and showing a patient the contents of a definition indicated in the patient's clinical recording according to a patient's request. Since a patient can understand description of his clinical recording, without imposing a medical practitioner's etc. time and effort, while laborsaving is possible, the explanation it is indicated [explanation] in a clinical recording and conviction of the contents goes comes to be obtained. [direct] The basic knowledge which asks for the detailed explanation about a clinical recording is acquired from a medical practitioner.

DRAWINGS

[Drawing 1]

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                    20 制御部

1 操作端末部  ←→      カルテ検索   8
2 カードリーダ ←→      音声認識部   9
3 スキャナ部   ←→      文字認識部   10
4 画面表示部   ←→      用語検索部   11
5 印刷出力部   ←→      翻訳部       12
6 音声出力部   ←→      出力処理部   13
7 ファックス   ←→      電子カルテ   14
L1
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[Drawing 2]

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        スタート
          │
     S1  電子カルテ?
    Yes ←      → No
     │              │
S2 電子カルテ検索  S3 スキャナ入力
     │              │
     │          S4 文字認識
     │              │
     └──────┬───────┘
            │
    S5 翻訳範囲指定
            │
    S6 用語検索
            │
    S7 説明文構成
            │
    S8 説明文出力
            │
          終了
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